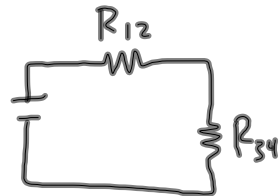
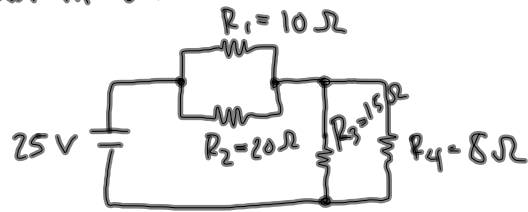


Find all V 's and I 's:

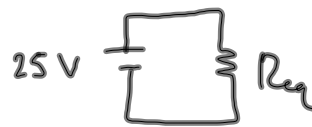


$$\frac{1}{R_{12}} = \frac{1}{R_1} + \frac{1}{R_2}$$

$$R_{12} = 6.67 \Omega$$

$$\frac{1}{R_{34}} = \frac{1}{R_3} + \frac{1}{R_4}$$

$$R_{34} = 5.22 \Omega$$

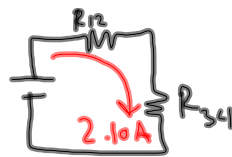


$$R_{eq} = R_{12} + R_{34}$$

$$= 11.9 \Omega$$

$$V_{total} = I_{total} R_{eq}$$

$$I_{total} = \frac{25V}{11.9\Omega} = 2.10A$$



$$V_{12} = I_{total} R_{12}$$

$$= 14.0V$$

$$V_{34} = I_{total} R_{34}$$

$$= 11.0V$$

$$V_1 = 14V$$

$$I_1 = 1.4A$$

$$V_2 = 14V$$

$$I_2 = .7A$$

$$V_3 = 11V$$

$$I_3 = .73A$$

$$V_4 = 11V$$

$$I_4 = 1.38A$$

$$I_3 = \frac{V_{34}}{R_3} = .73A$$

$$I_4 = \frac{V_{34}}{R_4} = 1.38A$$

$$I_1 = \frac{V_{12}}{R_1} = 1.4A$$

$$I_2 = \frac{V_{12}}{R_2} = 0.7A$$

Find P_2 : $P_2 = I_2 V_2 = 9.8W$

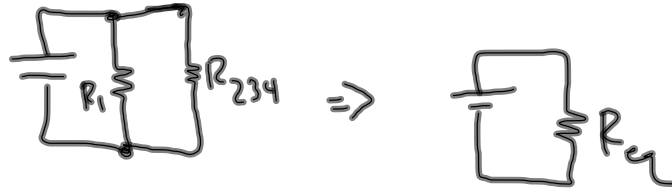
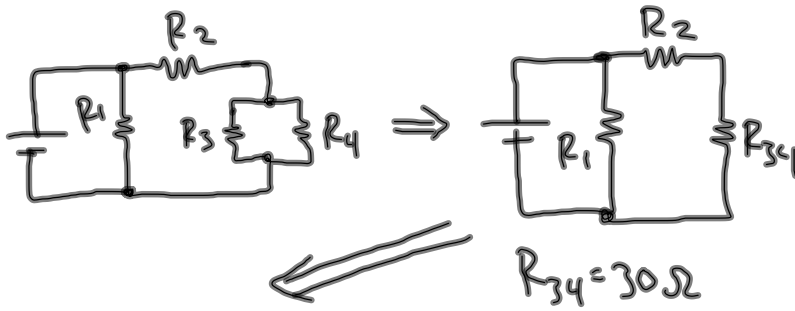
Find all V 's and I 's:

$$R_1 = 80 \Omega$$

$$R_2 = 100 \Omega$$

$$R_3 = 50 \Omega$$

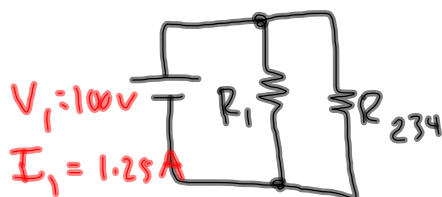
$$R_4 = 75 \Omega$$



$$R_{234} = 130 \Omega$$

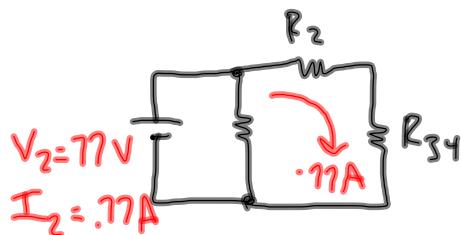
$$R_{eq} = 49.5 \Omega$$

$$I_{total} = \frac{V_{total}}{R_{eq}} = \frac{100V}{49.5 \Omega} = 2.02 A$$



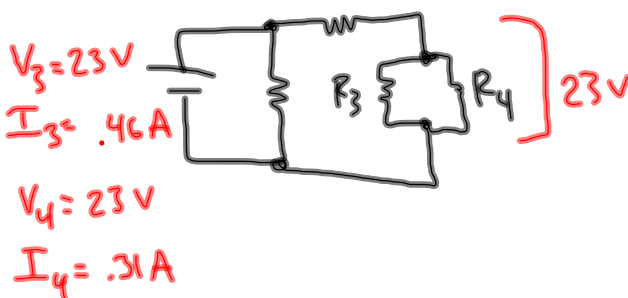
$$I_1 = \frac{V_{total}}{R_1} = 1.25 A$$

$$I_{234} = \frac{V_{total}}{R_{234}} = 0.77 A$$



$$V_2 = I_{234} R_2 = 77V$$

$$V_{34} = I_{234} R_{34} = 23V$$



$$I_3 = \frac{V_{34}}{R_3} = .46 A$$

$$I_4 = \frac{V_{34}}{R_4} = .31 A$$

Find all V 's and I 's:

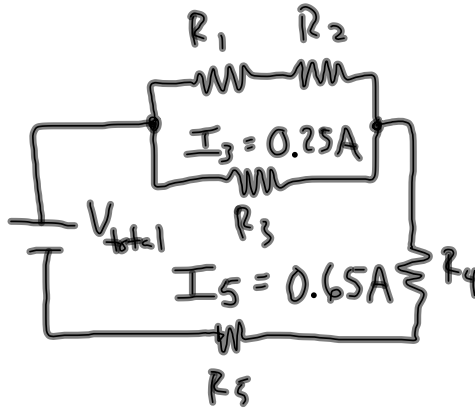
$$R_1 = 12 \Omega$$

$$R_2 = 56.5 \Omega$$

$$R_3 = 100 \Omega$$

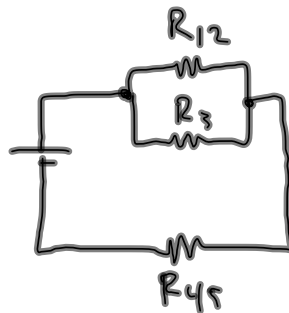
$$R_4 = 30 \Omega$$

$$R_5 = 25 \Omega$$



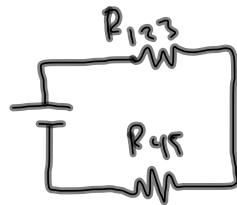
$$V_3 = I_3 R_3 = 25 \text{ V}$$

$$I_4 = 0.65 \text{ A}$$



$$R_{12} = 62.5 \Omega$$

$$R_{45} = 55 \Omega$$

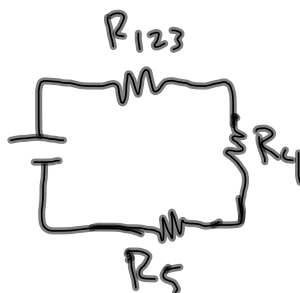


$$R_{123} = 38.6 \Omega$$

$$V_{\text{total}} = I_{\text{total}} R_{\text{eq}} = 60.8 \text{ V}$$



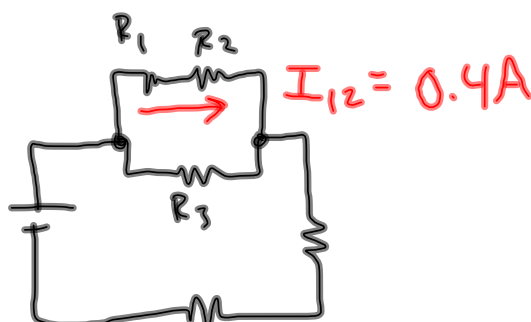
$$R_{\text{eq}} = 93.5 \Omega$$



$$V_{123} = 25 \text{ V}$$

$$V_4 = I_{\text{total}} R_4 = 19.5 \text{ V}$$

$$V_5 = 16.3 \text{ V}$$



$$I_{12} = 0.4 \text{ A}$$

$$V_1 = I_{12} R_1 = 4.8 \text{ V}$$

$$V_2 = I_{12} R_2 = 20.2 \text{ V}$$

Find all V 's and I 's:

$$R_1 = 70 \, \Omega$$

$$R_2 = 90 \, \Omega$$

$$R_3 = 110 \, \Omega$$

$$R_4 = 85 \, \Omega$$

$$R_5 = 92 \, \Omega$$

